

## ABSTRACT

A software implementation of an application watchdog, comprising a restart service operating in the user mode and a watchdog driver operating in the kernel mode of a computer operating system. The driver incorporates a system thread configured to monitor a plurality of user applications operating in the user mode. The driver provides a first IOCTL signal interface for communicating control signals between the watchdog driver and one of the user applications and a second IOCTL signal interface for communicating control signals between the watchdog driver and the restart service. A communication interface exists for coordinating timer events with the operating system scheduler. If the system thread does not receive a message from one of said applications within an allotted period of time, the timer event alerts the watchdog driver that the allotted time has elapsed and the watchdog driver signals the restart service to restart that application.